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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/643,627	08/19/2003	Johan Sundelin	MPI93-006CP1DV1ACN1DV1M	4455

50446 7590 12/28/2006  
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MILLBURN, NJ 07041

EXAMINER
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GUZO, DAVID

ART UNIT	PAPER NUMBER
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1636

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	12/28/2006	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/643,627

Applicant(s)

SUNDELIN ET AL.

Examiner

David Guzo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04 October 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 27,28,44-52,57-65,68 and 69 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 46,47,57 and 58 is/are allowed.
- 6) ☒ Claim(s) 27,28,44,45,50-52,59-65,68 and 69 is/are rejected.
- 7) ☒ Claim(s) 48-49 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **Detailed Action**

As applicants note in their response, filed 10/4/06, the examiner indicated that claim 45 was indicated as being allowed on page 13 of the Office Action mailed 6/2/06. This was a typographical error as the examiner meant to indicate that Claims 46-47 and 57-58 were allowed. Claim 45 was clearly rejected under 35 USC 112, 1<sup>st</sup> paragraph (enablement and written description) in the Office Action of 6/2/06 and was not allowed. The examiner regrets any confusion this oversight may have caused.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 27-28, 44-45, 50-52, 59-65 and 68-69 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

This rejection is maintained for reasons of record in the previous Office Action and for reasons outlined below. The rejection has been expanded to include claims 27-28, 44-45 and 50-51 as a result of applicants' amendment filed 10/4/06.

Applicants address this rejection by amending independent claims 27 and 44 to include the limitation of "an isolated C140 receptor polypeptide" and asserting that "...the polypeptides of claims 52, 59-65 and 68-69 have become limited to a particular

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species of C140 receptor polypeptides." (page 15 in the "Remarks" section of the response filed 10/4/06) and that they have therefore adequately identified the scope of the C140 receptor polypeptides.

Applicant's arguments filed 10/4/06 have been fully considered but they are not persuasive. Applicants' amendment does not limit the claims to a particular species of C140 receptor polypeptide. For example, claim 27, as amended, reads on any C140 receptor polypeptide molecule from any species or any variant C140 polypeptide or any glycosylation variant (involving insertion, deletion or substitution of an amino acid at any position), etc. as long as the C140 receptor polypeptide has at least a 15 consecutive amino acid sequence (out of a molecule almost 400 amino acid residues in length) encoded by a nucleic acid molecule that hybridizes under stringent conditions to the complement of SEQ ID NO:3 or 62. The claims, contrary to applicants' statements, are not limited to a particular species of C140 receptor polypeptide, but instead read on a genus of potentially millions of different molecules.

The C140 receptor polypeptide is a G protein coupled receptor and appears to be a protease-activated receptor. However, the examiner notes that it is unclear what characteristics of the C140 molecules distinguish them from other protease-activated receptors. As noted by the examiner in the previous Office Action (mailed 6/2/06), the art is replete with examples of numerous other G protein coupled receptors which have seven transmembrane regions and putative protease cleavage sites (See for example, Shi et al., Mol. Cancer Res., 2004, Vol. 2(7), pp. 395-402). Without elucidation of the sequences which are essential for a protein to be recognized as a C140 receptor

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polypeptide, the skilled artisan would not be able to recognize whether any given polypeptide containing a putative protease receptor cleavage site and seven transmembrane regions characteristic of hundreds of different G protein coupled receptors and protease activated receptors would or would not be a C140 receptor polypeptide. Interestingly, in a post filing paper by Blackhart et al. (J. Biol. Chem., 1996, Vol. 271, No. 28, pp. 16466-16471, two of the authors of the paper are the inventors of the instant invention) which deals with ligand cross-reactivity within the known members of the protease activated receptor family, the C140 receptor is not mentioned. Additionally, Blackhart et al. notes that the members of the protease activated receptor family appear to differ widely with regard to function and activation or inhibition by agonist and antagonist peptides, respectively. It must be considered, absent evidence to the contrary, that the two C140 sequences disclosed by applicants (they are around 84% identical at the amino acid level) are not a representative number of species sufficient to provide a description of the claimed genus. The skilled artisan would therefore not conclude that applicants were in possession of the claimed genus.

Any rejections not included in this Office Action are withdrawn.

Claims 46-47 and 57-58 are allowed.

Claims 48-49 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Guzo, Ph.D., whose telephone number is (571) 272-0767. The examiner can normally be reached on Monday-Thursday from 8:00 AM to 5:30 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Irem Yucel, Ph.D., can be reached on (571) 272-0781. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

David Guzo  
December 24, 2006

  
DAVID GUZO  
PRIMARY EXAMINER